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ABSTRACT

The literature review attempted to identify: 1) what we know and don't know about post-secondary aspirations, expectations, and access; and 2) where and how it is possible for us to embark on solutions or further investigation. The research in this area has been heavily sociological. Socio-economic background, family size, community origins, availability of educational facilities, birth order, sex, language, ethnicity, significant others, and information access were generally used as independent or background variables with students' aspirations and expectations as dependent variables. The relationships are now quite clear. For instance, statistical comparisons show that a lower-class student from a rural background has less chance of aspiring or expecting to enter university than his rich, urban counterpart. Females have less chance than males. So do students from large families, especially lower-class families. While these variables do interact, the general relationships hold even when mental ability is controlled. However, we do not have a full understanding of the relative influence of students' financial ability or value orientation. While some believe that money matters, a significant portion of the relevant research, at least tentatively, suggests that attitudinal factors are as important as financial considerations. We also do not have a clear understanding of some of the psychological variables which may mediate between students' sociological conditions and their post-secondary plans. Some suggestions are made for further research and the school's role. (Author)

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EDUCATIONAL ASPIRATIONS, WHAT MATTERS?

A Literature Review

Ramesh Deosaran

November, 1975.

Project Director
E. Wright

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THE REQUEST

What are the factors related to students' post-secondary educational expectations? How are these expectations formed? In an attempt to gain a fuller answer to these questions, the Board on February 13, 1975 approved the following motion:

> "That the Toronto Board initiate a research project to up-date the Every Student Survey of 1970. That it include a study on the formation of educational future post-secondary expectations amongst intermediate (7, 8, 9, 10) students and their families. That the following variables be considered:
>
> 1) Existence of tuition fees
> 2) Nature of support scheme
> 3) Socio-economic background
> 4) Sex
> 5) Cultural determinants
> 6) Access to information about post-secondary education
> 7) Expectations of family, school, student
> 8) Academic determinants
> 9) Peer group determinants
> 10) Demographic determinants."

(p. 89)

However, before undertaking such a study they asked that as a first step both a research design and the budget implications be presented to the School Programs Committee. On April 3, 1975, the Board accepted a recommendation from the School Programs Committee:

> "(c) That the Board initiate, subject to budget considerations, a review of the literature on post-secondary expectations and accessibility. The object of this study is primarily to prepare recommendations designed to improve Toronto student accessibility to post-secondary education, and that an amount of $6,000.00 be included in the Budget estimates for this purpose."

(p. 188-189)

OVERVIEW

This report is in response to the Board's request of April 3. It focusses on relevant Ontario research and other Canadian work. Generally, research from outside the Province is used for supplementary purposes. Because this extensively documented review has focused on a particular collection of studies many reports are cited frequently as each variable is considered in turn. Where other studies, i.e. American and British, dealt with variables or issues not included in the Canadian research, these studies are introduced to suggest areas for possible local investigation as well as to create a more coherent picture of accessibility and students' post-secondary educational aspirations. This review attempts to identify:

1) What we know about post-secondary expectations and accessibility.
2) What we do not know about post-secondary expectations and accessibility.
3) How and where it is possible for us to embark on solutions or further investigation.

It is recognized in the next chapter that the Board's concern with accessibility is widely shared by the public -- although much of the public concern focusses on educational expenditures and enrolment trends.

This report places the emphasis on "aspirations" rather than "expectations" because:

1) Very little work has been done in Ontario and the rest of Canada on "expectations". Rather, the bulk of research, both inside and outside Canada, has focussed on "aspirations."

2) What a person expects to do (expectations) is normally included within those things that person desires to do (aspirations).

3) Thus, once the general relationships between aspirations and expectations are understood, it is not difficult to sense, from a review focussed on "aspirations" how the same variables might affect "expectations."

It will become apparent in this report that the inter-relationships among the factors linked to students' educational aspirations are very complex. Moreover, the processes assumed to underly the formation of such aspirations are seen as being quite "elusive."

Nevertheless, each variable is considered both separately and in its relationship with others as the research warrants. The theoretical and philosophical issues which some researchers raise are gradually introduced if only to suggest that some findings depend on the perspective taken by the research.

Towards the middle of the report the relative importance of money itself in comparison to value orientation is explored as an impediment to accessibility and post-secondary aspirations. It is implied that while isolated variables (e.g. sex, peer group, family size) may bear a relationship to students' post-secondary educational aspirations, there may be more encompassing variables which will contribute to a better understanding of the formation of such aspirations.

This necessitates a fairly lengthy discussion about the role and nature of financial resources on one hand and values on the other in the context of educational aspirations. There is some relationship between the two but as the evidence seems to suggest, each one could function independently. The issue is quite interesting since a pervasive (perhaps commonsense) notion is that lack of money is the overwhelming obstacle between poor, able students and university, or even other forms of post-secondary institutions.

The other possibility which emerges towards the end of the report is that a value orientation — with or without financial ability — contributes in no small way to accessibility and aspirations.

The comments on methodology attempt to provide a critical look at the traditional way of conducting research on students' educational aspirations.

The report concludes with an attempt to link the formation of educational aspirations to broader societal processes and values. For instance, what kinds of judgement can one make about either a well-off student or, more particularly, a poor student, of high ability who with high personal satisfaction chooses not to attend a post-secondary institution? How do students' perceptions of the prestige and income potential of post-secondary credentials relate to their educational aspirations?

CONCERNS: ENROLMENT AND EXPENDITURE

Any attention given to the quality and quantity of student movement into Ontario's post-secondary institutions is strongly justified, at least by the mounting public concern in that direction (Pike 1970 b, and Carey 1975). The concern has recently been heightened by the additional fact that one of the issues of the 1975 Provincial elections was educational quality and costs.

Even internationally, the subject of post-secondary access has aroused tremendous interest as indicated by the comprehensive Robbins Committee Report (1963) on university access in the United Kingdom, by the massive UNESCO (1963, 1965) case studies, and by the top-level 1967 Vienna Conference of European Education Ministers (1968).

In terms of academic debate and research in Canada, educators have tried to grapple with the problem (Fleming, 1957, 1965; Pike, 1970; Breton, 1972; Committee for University Affairs, 1967, 1968; Committee of Presidents of Universities of Ontario, 1971). It even extends into the realm of Government-University relations. Consider the political implications of the statement made in 1966 by the Hon. William G. Davis, then Minister of Education, and now Premier of Ontario:

> "The degree of autonomy enjoyed by the provincially assisted universities of Ontario is equivalent to, if not greater than, that known by publicly supported universities anywhere ... There is, moreover, much evidence to indicate that provided the universities can meet the responsibilities of our times we should undoubtedly be better off if they were allowed to continue to operate with such autonomy. On the other hand, if they cannot or will not accept those responsibilities, and if, for example, large numbers of able students must be turned away ... I cannot imagine any society, especially one bearing large expense for higher education, will want to stand idly by."
>
> (emphasis added) Davis, 1966

The extent to which "large numbers of able students" are turned away will be considered later in this report.

This prevailing mood fits in with general public apprehension over the specific relationship between student enrolment and the educational system, even at the lower educational levels. For instance, a recent Toronto study (Young & Reich, 1974) earned public attention when it revealed that "only 40% of the students entering grade 9 will graduate from grade 12 and only 20% from grade 13" (p.43). To put it another way, 80% of the students entering grade 9 in Toronto high schools will likely not complete grade 13 and thus will be unable to continue into university.

To put these figures into a time and provincial perspective, it should be noted that in 1947, of the pupils entering grade 9 in Ontario high schools, only 20% survived to grade 13. Later in 1966, this figure increased to 40% (Porter et al., 1973).

Furthermore, in a comparison among the ten provinces for the 1966-67 academic year (Pike 1970) Ontario ranked second to last in terms of the number of university students as a percentage of the appropriate age group in the Province. Moreover, a preliminary comparison (1966-67 figures) among the Provinces of British Columbia, Alberta, Newfoundland, and Ontario, revealed that Ontario ranked last in terms of percentage of high school matriculants enrolling at university (Pike, 1970).

Therefore, the additional facts that:

1) enrolment in Ontario's degree granting institutions jumped from 20,000 in 1951-52 to 93,000 in 1968-69 (Cook & Stager, 1969) with a projected 200,000 for 1978-79 (Watson & Quazi, 1969);

2) institutional costs per full-time university student in Ontario escalated from $1,260.00 in 1956-57 to $2,735.00 in 1965-66 (Cook & Stager, 1969);

3) Ontario Government aid per full-time student as a percentage of total Government university expenditures increased by ten times from 1959-60 to 1967-68 (Cook & Stager, 1969);

all combined to attract wide and continued public concern in this Province. Furthermore, a detailed analysis for Ontario (Jackson & Fleming, 1957) revealed that, as far back as the early fifties, of 100 children who began school life, 61 entered grade 9, 56 entered grade 10, 46 entered grade 11, 21 completed grade 12, 13 completed grade 13 and 4 entered university. This compared unfavourably with the Canadian average at that time of 7 entering university from an initial 100 beginning school life. The above trends and circumstances converged in one way or another to impel a closer look at first, who really aspires, and second, who gains access to the province's post-secondary institutions.

While the emphasis in this review will be on Toronto, Ontario and Canadian research in that order, evidence from other regions will be strategically used to support, supplement, or extend that found within the Canadian context.

The major focus will be on students' post-secondary educational aspirations, but reference to the main features of actual post-secondary enrolment trends heightens the relevance and importance of the discussion on such aspirations, as well as justifying the present public and academic concern related to the issue.

The implicit assumption made in the relevant research is that, generally, one's educational aspirations bear a relationship to subsequent educational attainment. Moreover, a consideration of how students' post-secondary aspirations are shaped enables one to probe into the extent to which government policy and social values might be altered.

Again, while some attention will be paid to students' aspirations and input to community colleges (e.g., Colleges of Applied Arts and Technology), university aspirations and access will be emphasized if only to capitalize on the crucial processes linking the formation of post-secondary aspirations and subsequent societal implications (e.g., social mobility).

ASPIRATIONS AND EXPECTATIONS: DEFINITION AND RELATIONSHIP

While it is true that "the research taken as a whole, is not very consistent in its nominal or operational definitions of aspiration" (Rodman et al., 1974, p. 184), there is sufficient concensus within Canada to accept the definition of aspiration as "the desires which individuals have to attain some future goal for themselves" (Williams, 1972; Porter et al., 1973; Pike, 1970).

Much of the misunderstandings in interpreting students' post-secondary plans is based on the use of "aspiration" and "expectation" to mean the same thing (Nelson, 1972; Sewell & Shah, 1968a, 1968b). In the first place, students' aspirations have been discussed more widely and subjected to more intensive research than expectations. Technically, while "aspiration" refers to what a student would like to do, or the goal which he would like to attain, "expectation" is viewed as a more "realistic" choice of action or goal. It must be noted, however, that expectations are usually subsumed within aspirations.

Wherever the two concepts have been compared, it was generally found that:

1) Both the level of aspiration and the level of expectation are related to the students' social class background, with the latter more strongly related. Also, group measures of the level of aspiration are consistently higher than those of the level of expectation (Rodman et al., 1974).

2) When individual or group discrepancies between level of aspiration and level of expectation have been related to social class, the discrepancies are larger for students of the lower class than for those in the middle class (Han, 1968; Porter et al., 1973; Caro and Pihlblad, 1965; Elder, 1970; Clark et al., 1969).

3) The gap between the level of parents' expectations and aspirations was slightly greater than the gap between their children's expectations and aspirations, with the gaps again being wider for those parents and children from low social class background (Porter et al., 1973).

The literature on students' post-secondary expectations within the Canadian context is relatively sparse. Furthermore, aspiration is a more interesting concept because it refers to the full range of life's opportunities which an individual is capable of seeing for himself or herself. In order to get a more general picture of the social and psychological processes related to how students think about their educational future, students' aspirations, except for the preceding comments on expectations, are emphasized in this paper.

SOCIAL CLASS AND SEX: TWO PREDOMINANT FACTORS

When pioneer efforts in Ontario began to unravel a host of mitigating circumstances in the journey from high school to post-secondary institutions, initial concerns grew in seriousness. Further justification for these concerns was based on an inter-Provincial comparison on students' educational aspirations and provincial economic development (Breton, 1972). It was found that students in Ontario "occupied a rank much lower for both secondary and post-secondary plans than its economic development would indicate" (p 131). Even as far back as some 20 years ago, Jackson (1957, p. iii) conjectured:

> "Recent years have been marked by increasing concern over the wasted talents of a proportion of our Canadian young people. Lack of knowledge, of interest, financial means, or favourable environmental influences have prevented them from reaching the maximum level of educational development."

Some of the key issues which pervaded the relevant research over the past twenty years hinged on philosophies concerned with equality of educational opportunity (Pavalko, 1967; Porter, 1974; Cook & Stager, 1969), existing conditions of accessibility (Clark et al., 1969; Council of Ontario Universities, 1971; Commission on Post-Secondary Education in Ontario, 1972; Bissell, 1957), and financial aid (Student Administrative Council, University of Toronto, 1971; Pike, 1970).

Social Class

In spite of differing perspectives, it became quite evident from the above studies, that social class, in whatever way deduced, was crucially linked to students' post-secondary intentions and enrolment. One research team (Porter et al., 1973) put the issue squarely:

> "We have demonstrated that educational ... horizons of Ontario high school students are bounded by the class structure in which they live; that, associated with that class structure, there is a wastage of bright young people from the educational process; and that girls, particularly lower class girls, see themselves destined for the labour force and excluded from the learning force in greater proportions than boys of the same class level and boys or girls from the classes above them. No amount of multivariate analysis or causal model building will alter these facts, although they no doubt help to elucidate the way in which social class has its effects (through intervening factors such as school program, academic achievement, and the encouragement of parents and others) on the level of aspirations for both education and career."
>
> p. x (emphasis supplied)

What then, are some of the specific relationships between social class and sex and actual post-secondary enrolment? One reviewer (Pike, 1970, p. 55) observed that children of upper class parents "were very greatly over-represented among Canadian university students relative to their total numbers in the Canadian population." An analysis of some 8,000 university students drawn from all Canadian provinces showed that "over one-half of the students attending Canadian universities (in 1957) were drawn from a social segment of the population (i.e. middle and upper classes) which, in total, contained only about one-fifth of the country's children", (p. 183).

The following Table (Table 1), which has been frequently cited, is one indication of social class bias in university enrolment:

TABLE 1

SOCIAL CLASS ORIGINS OF 7,947 CANADIAN UNIVERSITY STUDENTS
(BLISHEN OCCUPATIONAL SCALE)

		% of labour force		% of children at home with fathers in labour force		
Fathers' occupational class	% of students	Total*	Male heads of family with children†	All children†	Children aged 14–24 years†	Ratio of representation‡
Class 1	11.0	.9	1.4	1.1	1.0	10.00
Class 2	34.9	10.7	14.7	10.4	13.5	3.36
Class 3	4.8	6.3	4.0	3.5	3.1	1.37
Class 4	7.1	7.0	5.0	4.9	4.7	1.45
Class 5	19.7	23.9	24.8	22.6	18.4	.87
Class 6	5.8	19.6	15.1	16.1	15.5	.36
Class 7	5.3	21.3	13.8	14.9	14.5	.36
Farmers§	11.4	10.3	16.8	20.7	26.0	.55
Unclassifiable‖			4.4	5.7	3.3	

*Computed from B. R. Blishen, "The Construction and Use of an Occupational Class Scale," *C.J.E.P.S.*, XXIV, no. 4 (Nov. 1958), Table 2(b); and *Census of Canada, 1951*, vol. IV, Table 4.

†Computed from *Census of Canada, 1951*, vol. III, Table 141.

‡Obtained by dividing column 2 (% of students) by column 5 (% of all children at home with fathers in labour force).

§Census occupation class of "farmers and stock raisers."

‖"Others" and "not stated" in census.

Reproduced from:
J. Porter, The Vertical Mosaic, p. 186

Ten years later (1965-66), another extensive review confirmed the persistence of the social class factor when it found, among other things, that only 35% of Canadian undergraduate students had fathers who were "blue-collar workers compared with 64.1% of employed Canadians who held jobs that were so classified", (Rabinovitch, 1966, p. 45).

Again, the overriding conclusion was that Canadian university students are "by and large not representative of the Canadian class structure but rather bear the characteristics of the middle and upper classes of Canadian society" (p. 41)

This apparently disturbing class bias in attendance also prevailed in British (Little and Westergaard, 1964) and American (Jencks and Reisman, 1968) universities. Specifically, Little and Westergaard showed that the expansion of the English universities in recent years has, if anything, benefitted children of middle class people and skilled workers more than those from semi-skilled and un-skilled workers' homes.

In their extensive review of higher education in the United States, Jencks and Reisman concluded that the expansion of the two-year and four-year colleges in that country has not benefitted those from the lower-middle and working classes in terms of improving their access to post-secondary education.

Even when the social class setting of high schools is considered, the class bias still persists. For instance, in one Toronto study (Buttrick, 1973), it was found that 54% of the grade 9 students in schools within predominantly middle class neighbourhoods eventually entered Ontario universities as compared to 12% of a similar sample in schools located within lower class neighbourhoods. However, while the percentage difference was smaller, this trend with respect to social class was reversed for Grade 9 students subsequently entering Ontario Colleges of Applied Arts and Technology (CAAT).

Buttrick, in a preliminary observation which was nevertheless consistent with more extensive research, conjectured that forces within the high school system in Toronto appeared more crucial than university admissions policy per se when the question "who should attend university?" is raised. He noted: "The results (in Toronto) are hard to believe ... Selection of students who will become eligible for university admission is currently done by the (Toronto) school system not by the universities" (p. 7).

Buttrick's observation of the relationship between social class milieu of Toronto schools and post-secondary enrolment was consistent with a previous analysis for Ontario (Marsden and Harvey, 1971) which revealed that 65% of lower class students went to post-secondary, non-university institutions (e.g. CAAT) as compared to 49% of middle and upper class students. In light of the entrenched public conviction regarding relationships between university attendance, opportunity and social mobility (Cuneo and Curtis, 1975, p. 6), the apparent class differential at the community college level further aggravates the problems surrounding the Ontario Government's policy of "universal access" to post-secondary institutions (Commission on Post-Secondary Education in Ontario, 1972, p. 33).

This apparent conflict between policy and fact is all the more unfortunate in view of the Ontario Government's aid program. Porter (1974), taking the evidence into account, bluntly put it this way: "Generally, the student award schemes meant to help the disadvantaged fall short of any principle of justice" (p. 10). Once it became firmly recognized that ascriptive factors sometimes dominant over achievement considerations were linked to post-secondary access, inquiry into the high school population became necessarily more urgent (Pavalko, 1967, p. 250).

Considering that a student's enrolment at university is preceded by a decision about high school programs -- a decision which in itself is presumably subjected to the level of the student's educational aspiration -- it was deemed essential to see how far down the high school system the presence of ascriptive and other factors became crucial in the emergence and development of this aspiration. The task, from a research point of view, was made more difficult by the discovery that while Ontario parents and students from different socio-economic levels placed almost equal value on the monetary and non-monetary returns of post-secondary education (Fleming, 1957, p. 27; Clark et al., 1969, pp. vii-110; Porter et al., 1973, p. 74), in terms of actual student representation at the post-secondary level, a social class discrepancy persisted.

The picture is thus complicated by two facts:

1) In spite of the tendency to place similar values on education, the different social class divisions in the sample held different education aspirations (Porter et al., 1973, p. 55).

2) While the academic consequences of financial availability remains shrouded in controversy, many high ability students from lower social classes disproportionately persisted in not aspiring to university.

Moreover, while there were significantly more students from the lower socio-economic bracket in the early high school grades, a greater proportion of students from high socio-economic groups went on to Grade 13 (Porter et al., 1973, p. 45).

Specifically, Clark and others (1969) noted, with respect to an Ontario sample, that "only one student in four whose family annual income is less than $5,000 per annum reaches grade 13 from grade 9 while more than one student in two from a family whose income is over $10,000 reaches such a level" (p. ix).

Once students arrived in grade 13, it was found with respect to educational aspirations that "few distinctions exist between students from different classes" (Clark et al., 1969, p. ix). Their conclusion, shared by others (Fleming, 1957; Anisef, 1974), was: "The problem of class determinance of behaviour is not, then, at the end of the high school, but much earlier" (p. ix). This implied that a filtering system, or more deliberately, a process of elimination to the poor student's disadvantage, became activated much earlier than grade 13 level.

In linking the social class bias in post-secondary enrolment to this eliminating process, Porter (1961) wrote:

> "Whatever may be said about average intelligence and social class, the fact remains that in absolute numbers there are more of the highly intelligent in lower classes than in the higher."

He concluded: "It is a disgrace that this intelligence should be wasted because it lies in an inhospitable environment", (p. 129).

Whatever actual wastage or disproportionality exists in terms of high school retention or post-secondary access, it is assumed in this paper (as well as most cited research) that they are preceded to some extent by differential aspirations among those so affected. While evidence for this assumption is generally deductive, at least one longtitudinal study (Sewell and Shah, 1967) produced evidence to support it. It must also be noted, as Anisef explained (1974), that wherever educational aspirations and actual behaviour differ, it is likely to be so for a number of mitigating or unforeseen circumstances.

Sex

One report from the Atkinson project (Fleming, 1957a) found that, in spite of other similar characteristics, "about five boys went to university (from Grade 13) for every two girls" while nearly "50% more girls than boys went into other education." This discrepancy by sex, in Ontario at least, compelled the author to conclude:

> "Apparently, certain selective factors at work during the high school years were considerably harder on the latter, since the sexes were fairly evenly balanced up to the end of the period of compulsory attendance."
>
> p. 17

This trend was later borne out by Canadian census figures (Dominion Bureau of Statistics, 1966, p. 28). Specifically, in 1960-61, the enrolment of men at Canadian universities was equal to 16.4% of the male population 18-21 years of age contrasted with only 5.4% for women (Beattie 1961, p. 26). In 1966, 13.1% of the male 18-24 population in Ontario entered university as against 5.8% of the female 18-24 population - a difference of 7.3%. Moreover, these combined percentages pushed Ontario to rank second-to-last among Canadian provinces with respect to university enrolment as a percentage of the 18-24 year population (Pike, 1970, p. 205).

In addition to social class, sex, therefore, emerged as another strongly mitigating ascriptive factor, both in the late high school grades and subsequent entrance to university. It is also important to note that, in spite of Ontario's continued efforts towards creating equal accessibility (e.g. minimizing the impact of ascriptive factors), Marsden and Harvey (1971) showed that, five years later, without age considerations, this sex discrepancy was 14.2% for Ontario university enrolment (p. 20). However, females outnumbered males by 17.7% for "post-secondary non-university enrolment" (p. 20). The latter trend has been confirmed for Canada (Beattie, 1970, p. 26) and Ontario (Harvey and Masserman, 1973, p. 19). It seems then that to be poor is bad enough, but to the extent that university attendance is related to social privilege and mobility, to be both poor and female, as Porter (1972, p x) noted, is quite prohibitive.

High School Grade: Its Importance

But is it sex or ability per se which seems to be the mitigating factor against females in the journey from high school to post-secondary institutions? There is evidence which indicates that, in the later grades, girls bear as high and sometimes higher achievement and mental ability scores than boys to an extent which does not justify their disproportionate non-attendance at university (Breton, 1972, pp. 486-487; Porter et al, 1973, p. 128). Furthermore, there are those who believe that the poor or the female do have, at some time or other, relatively high educational aspirations but, confronted by so many obstacles, current and potential, discover that educational attainment is quite restricted (Canadian Welfare Council, 1965, p. 147).

Pavalko (1967) thus appears to be correct when he concluded: "Whether the high school allocates its students to college or to the world of work, it is by no means determined exclusively by the intellectual characteristics of students" (p. 259). There is, however, some uncertainty as to which specific grades the relative influence of ascriptive factors erupt in significant ways.

In a later Ontario study, (Porter et al., 1973) grade 8 was considered the crucial year because students had to make a decision there as to whether they wanted to enter the four or five-year high school program in grade 9. While enrolment in the four-year program restricts subsequent university entrance, the five-year program is virtually geared towards university entrance. The Porter team found evidence to support their assumption.

Pavalko (1967), identifying the Junior Matriculation year (Ontario grade 12) as "a crucial point", wrote:

> "Going on to the senior year means essentially that a person is continuing along the path toward university. Not continuing in school after the junior year means essentially that he is headed toward work. We suggest that selection up to this point in the educational system is related to both socio-economic background and intellectual ability, but when the latter variable is controlled, going on to the senior year (and, conversely, not continuing in school) is related to socio-economic background."
>
> p. 250

Pavalko, too, found evidence from two Ontario districts to support this hypothesis (p. 258).

Others found the social class bias prevading all high school grades (Clarke et al., 1975, p. 82). From this study actually conducted in 1969 on some 8,000 Ontario students, it was found that across all grades, only

28% of the students from low social class backgrounds aspired to a university education as contrasted with 65% of those from high social class background (p. 82). This finding is consistent with the results for all grades in a 1964 study in Ontario (Breton, 1972, p. 492) and a 1973 one on Ontario grades 10 and 12 students (Porter et al., 1973, p. 53). That there are many students from high social class background who do not hold university aspirations must also be noted from these studies.

Overall, these results could be looked at in two ways. First, the fact that sample selectivity (e.g. via social class) increased with grade level reduces the validity of inter and intra-sample comparisons. Second, since higher grades tend to be restricted to the higher achieving student, any social class differences in students' aspirations could bear increased importance.

However, the lack of statistical tests on these grade differences and the lack of information on "drop-outs" compel these viewpoints to remain tentative. Nevertheless, the previous discussion does suggest that social class, sex, school program, and grade level bear some relationship to high school students' post-secondary educational aspirations. In summary then, aspirations were generally regarded as a mediating psychological variable between social class background and actual educational attainment (Porter et al., 1973, p x).

An Enlarged View

The Executive Director of the Association of Universities and Colleges of Canada aptly summed up the essence of the foregoing findings:

> "Although the removal of financial barriers is an important and necessary step in ensuring universal accessibility, it was recognized that accessibility to higher education is not determined solely by finances. Indeed, there was evidence to suggest that a complex of social, cultural, and psychological factors play vital roles in determining a student's ability to plan to enter, or not to enter, an institution of higher learning."
>
> Preface in Pike, 1970.

This overview thus introduces a distinction between the relative influence of finance and cultural factors. But the research difficulties in the pursuit of this and related hypotheses were early recognized. In a penetrating observation, two educators (Jackson and Fleming, 1957) wrote: "Any investigation of the effects of environmental factors in aspirations is rendered doubly difficult by their very number, complexity, and general elusiveness" (p. 78).

It is important at this stage to note two points. One, the factors assumed to be related to students' educational aspirations are quite complex and also, difficult to study. Secondly, there is a budding distinction between the lack of money per se and a particular value orientation which restricts not only high educational aspirations but subsequent educational attainment. Obviously, the latter point raises tremendous questions, at least in terms of social stratification and the educational system. For instance, what is the direction, if any, of the relationship between social class and educational aspirations? In other words, do students' aspirations grow out of their social class status, or is their eventual status a result of their aspirations? Answers to these questions would require studies with both inter and intra-generational designs.

Predominantly, the research focus, however restricted, was in terms of intra-generational differences. As early as 1945, one report (Canadian Youth Commission) attempted, tentatively, to delve into the "complex of social cultural and psychological factors" involved and raised questions of premature entry into the work force, educational opportunity, the disadvantages suffered by rural and farm youth, and the need for tangible assistance to the underemployed. One conclusion was:

> "The present (educational) system is, to a certain extent, spoiled by the fact that persons with money can get and often waste opportunities which could be used to more advantage by other persons of greater ability but without money to back them up."

p. 35

TWO PROFILES OF THE UNIVERSITY-BOUND: 1957 AND 1973

About twelve years after the Youth Commission's arguments, the extensive Atkinson studies (1957) while attempting to unravel some of the specific processes impinging on educational aspirations among Ontario students, also raised a host of other related issues and so laid an early framework for subsequent research. For instances, in an analysis of all Ontario grade 13 students in 1955-56, it was found that size of school and size of community were directly and positively related to university aspirations (Fleming, 1957a, p. 18).

Furthermore, of the five reasons given by those who definitely did not plan to attend university, "lack of money" ranked second to "other plans for further education" (p. 32). As stated earlier, this emphasis on grade 13 students presents problems of interpretation due to the selective nature of sample. Nevertheless, the Atkinson project, in an early attempt to forge a profile of what a typical university-destined grade 13 student then looked like, wrote:

> "Regardless of sex, a student had the best chance [of going to university] if he was somewhat younger than the average prospective grade 13 graduate; if both his parents were living; if he came from a family with not more than three children; if his father enjoyed relatively high occupational status; if his parents were relatively well-educated; if one or more of his brothers and sisters had attended university; and if he had not done part-time work during his last year of secondary school."
>
> Fleming, 1957b, p. 52.

That was in 1957. Sixteen years later, an Ontario study of grade 12 students constructed this profile:

> "Those who plan on going to university ... tend to be male, rank high on social class background, come from urban areas, believe they have the ability to graduate from university (and have the grades to back up this claim) and possess higher occupational aspirations than students with other kinds of plans."
>
> Anisef, 1973, p. 141.

While regional relevance impels a comparison of the 1957 and 1973 Ontario profiles, it is worth noting a similar profile for the American university-bound student:

> "Those of high ability with good academic record were more likely to go to college than their less able classmates. Those whose parents had high incomes or were in the professional classes were more likely to go than those who had low incomes or little social status. Girls went less frequently than boys, even though their abilities were as high and their records higher. Negroes did not go in the same proportion as did whites. In certain regions of the country, high school graduates did not go in the same proportions as those of other regions. Urban young people were more likely to go than rural young people. Those who were near a college were more likely to go than those farther away. And those with a strong desire for a vocation which required college training were more likely to go than those of equal status who had no strong vocational interests."
>
> Hollingshead, 1952, p. 31

While relationships between educational aspirations and ethnicity, sex, geography, social status, and financial resources, are evident in Hollingshead's summary, one cannot help but recognize the consistency of trends among all these profiles. Apart from the specific factors of school program, grade level, and student-sex previously discussed, the comparison between the 1957 and 1973 profiles reveals the persistent relationship of family size, socio-economic status, student residence, community characteristics, and occupational aspirations with post-secondary educational aspirations. The slight differences in the two profiles seem to rest more on questionnaire differences rather than on any substantive changes in student type.

Personal, Family and Community Characteristics

Indeed, other studies throughout the years have confirmed these relationships between post-secondary educational aspirations and family size (Breton, 1972, p. 386; Porter et al., 1973, p. 131), socio-economic status (Porter, 1961; Pavalko, 1967; Cook and Stager, 1969; Clark et al., 1975, p. 82), student's geographical location and community characteristics (Canadian Welfare Council 1965, p. 45; Pavalko and Bishop, 1966, p. 297; Breton, 1972 p. 384), self-concept (Porter et al., 1973, p. 66), and occupational aspirations (Clark et al., 1975, p. 84). Some representative conclusions follow in terms of the interactive or surrogate nature of these variables.

Interactions: a closer look

On family size, Breton (1972) wrote:

> "While the size of the family is negatively correlated with educational intentions, the effect of family size is, however, somewhat reduced when socio-economic background is controlled."
>
> p. 386

In looking at the interaction between sex, intelligence and socio-economic status on one hand, and college aspirations and attendance on the other, an American study concluded:

> "On the whole, the relative effect of socio-economic status is greater than is the effect of intelligence for females, while the relative effect of intelligence is greater than is the effect of socio-economic status for males."
>
> Sewell and Shah, 1967, p. 22

The authors of this study, however, made the general comment that:

> "although intelligence plays an important role in determining which students will be selected for higher education, socio-economic status never ceases to be an important factor in determining who should be eliminated from the contest for higher education."
>
> p. 22

After their study of the socio-economic background of more than 1,000 grade 12 students in two Ontario communities, Pavalko and Bishop (1966) concluded:

> "To the extent that extraneous factors such as socio-economic background affect the likelihood of acquiring a higher education, the educational system has an equivalent amount of built-in talent loss. Our findings that high ability students of high socio-economic status are more likely to plan to go to college than those of high ability and low socio-economic status indicates that talent loss due to socio-economic selectivity is the case for at least that segment of the Canadian educational system examined here."
>
> p. 298

Though this interaction between ability and social class is generally confirmed in other research (Breton, 1972), in terms of aspirations it tends to be restrained by the emerging fact that substantial numbers of high ability students of high socio-economic status do not aspire to university. In fact, the Porter study indicated that 32% of such students did not aspire to university -- a percentage similar to that of high-ability, low socio-economic students aspiring to university (Porter et al, 1973, p. 100). So far, however, no systematic research has been undertaken to see, for instance, to what extent poor and rich students are similar or different in their reasons for not aspiring to university. Moreover, the additional fact that 40% of the students from high socio-economic level did not hold university aspirations tentatively weakens any argument for the overriding importance of money in this respect.

Combining geographical location and community characteristics within the urban-rural dichotomy, Porter and others (1973), after comparing the aspirations of 3,000 grades 8, 10, and 12 Toronto students with students from other parts of Ontario, wrote:

> "There was scarely any difference between students in Toronto and other major urban centres. (However) we found that for each level of urbanization, the lower the social class the lower the educational aspirations ... To be lower class and rural provides an extra handicap."
>
> p. 68

From earlier evidence, this further implies that to be female, lower class, and rural at the same time is a far worse combination.

The Porter team concluded:

> "It is clear from our analysis that urbanization is related to educational aspirations ... and that rural life is not conducive to continuing one's education as urban life."
>
> p. 70

This urban-rural bias in terms of educational aspirations and actual attainment is overwhelmingly supported by other Ontario (Clark et al., 1969; Breton, 1972; Canadian Welfare Council, 1965), Canadian (Cuneo and Curtis, 1975), and American (Elder, 1963) research. At this stage, it should also be noted, more specifically, that Fleming (1957b), eighteen years ago, had discovered that grade 13 students from Metropolitan Toronto, while representing 28% of a sample drawn from seven Ontario cities, comprised 36% of the total group of university-bound students.

The Atkinson study (Fleming, 1957a) further found that in terms of "encouragement by the school to attend university" Toronto students ranked third (58%) behind Hamilton (69%) and Ottawa (61%), with Kingston students (38%) receiving least encouragement as a group. However, a check in student enrolment (1956) at Ontario universities revealed that Toronto proper ranked first (23%) in the proportion of university students, with students from other parts of Metropolitan Toronto (13%) ranking second. Students from the other Ontario regions — both urban and rural -- did not exceed 5% in this regard. No doubt, these differences are influenced by the fact that Toronto contained the highest population of any of the other areas.

Nevertheless, a more compelling distinction is observed in the fact that 52% of the Toronto grade 13 students (second rank) enrolled as compared with 55% (first rank) of the Hamilton students, Windsor ranked last (41%) of all the other Ontario areas considered in this respect (Fleming, 1957b).

One of the implicit conclusions here is that the proximity of universities might have played a part in eliciting university aspirations. Fleming concluded:

> "Students from Hamilton had the best chance of going to university, followed by those from Toronto proper and Kingston. Those from Windsor and Metropolitan Toronto, excluding Toronto proper, had the poorest chance."
>
> p. 47

The increased preference for university among Toronto students is further reflected in the finding (Porter et al., 1973, p. 69) that 42%, 35%, and 42% of the Metropolitan Toronto students sampled in grades 8, 10 and 12 respectively, aspired to university as compared to 30%, 25% and 27% in similar grades in rural Ontario. However, the difference between Toronto and other large and small Ontario cities was much smaller in this respect. These findings must nevertheless bear some qualifications. Even within Metropolitan Toronto, more high, socio-economic students aspired to university, with the figure weighted in favour of boys (Porter, 1961, p. 13).

Percentage and average scores do not reveal the variations within a sub-group which, at least from Buttrick's preliminary analysis (1973), and the report by the Canadian Welfare Council (1965), could very well produce significant ethnic, social class, and sex differences within Toronto.

In a more general sense, Breton (1972) found that the presence of post-secondary institutions and community size were inversely related to students' educational indecision (p. 385). Backing this trend, a nation-wide survey revealed that the proportions of undergraduate students who came from homes situated in villages or small towns with a population of less than 1,000 varied from 13% of those enrolled in education programs down to 2.5% of those enrolled in faculties of medicine (Dominion Bureau of Statistics, 1963).

In that same period (1961-62), about 19% of Canada's total population lived in centres of less than 1,000 population. Pike, (1970) relayed the educational implications of this community differential:

> "A concomitant of the rural and small town environment is a set of values, beliefs and ways of doing things — i.e. a subculture — which adversely affects access to higher education ... Rural life tends to be oriented to the concrete and the practical, and actively discourages the creation of the theoretical and abstract cast of mind which is (or is supposed to be) inseparable from involvement in higher education."
>
> p. 73

Carrying this value argument further, Anisef (1973), in a study of Ontario grade 12 students, concluded:

> "One logical conclusion that should be drawn is that accessibility to higher education is not simply a question of inequities in financial resources ... Our results reveal that such social-psychological factors as parental encouragement, self-evaluation, and occupational aspirations are powerful determinants in explaining the educational decisions of students."
>
> p. 129

This conclusion finds support from research on other Ontario students at least (Cook et al., 1969, p. 8). A plausible argument, at this stage, could be that these "social psychological factors" are substitutes or a constellation of one or more embracing value orientation(s) which in themselves could be circumscribed by community characteristics. To the extent that this value orientation, if at all existent, is restricted by, or cuts across, social class remains a very provocative area for further research.

Still, to clarify and consolidate this line of argument requires a further elaboration of the "social-psychological factors" which are related to post-secondary educational aspirations. Self-evaluation or its surrogates (e.g. self-confidence and self-concept) are related to such aspirations in interesting ways (Anisef, 1973). In discovering a fairly strong relationship between self-concept and educational aspirations, the Porter team wrote:

> "A student's self-concept of ability is formed through interaction with parents, teachers, and peers, and reflects to a certain extent the opinions formed about the student's academic ability."
>
> Porter et al., 1973, p. 66

They then made the critical conclusion: "It is not enough to be bright and to perform well. One must also see oneself as being bright and capable of performing well", (p. 65). The recognition that self-concept is further related to social class, inspires a consideration of socialization processes, particularly within the family (Cook et al., 1967, p. 8; Clark et al., 1968, p. 94).

One Ontario team (Clark, Cook, and Fallis, 1975) hypothesized that the low self-concept held by poor students is engineered by past patterns of socialization, lack of appropriate referents, parental encouragement, a feeling of control over events and confidence in the future (p. 84). Other Ontario research tended to support this (Harvey and Masserman, 1973). It seems then that self-concept is itself a mediating psychological variable between social class and post-secondary educational aspirations.

With respect to the link between occupational and educational aspirations, it was found in an Ontario sample, and quite expectedly at that, that "across all grades, the students from higher income backgrounds had higher occupational aspirations which were also related to higher educational aspirations", (Clark, Cook, and Fallis, 1975, p. 85).

So far, the preceding discussion of the factors introduced by the two profiles showed that:

1) There is a strong consistency over time with respect to some variables related to post-secondary educational aspirations.

2) The interaction among some of these variables is indeed complex, further suggesting a possible hierarchical network for some.

OTHER FACTORS:

ACCESS TO RELEVANT INFORMATION, SIGNIFICANT OTHERS, BIRTH ORDER, LANGUAGE, ETHNICITY, RELIGION, TYPE OF SCHOOL AND PROGRAM, PERSONALITY FACTORS & FINANCIAL AID

However, there are other factors, at least in Ontario, which have yet to be fully discussed in this paper, in terms of educational aspirations. Among these are:

(i) Access to relevant information and the role of significant others (Young and Reich, 1974, p. 34; Breton, 1972, p. 387; Clark et al., 1969, p. 43; Reich and Zeigler, 1972, p. 387; Flowers, 1964, p. 9; Students Administrative Council, 1971, p. 18; Clark, Cook, and Fallis, 1975, p. 84; Pavalko and Bishop, 1966, p. 200; Marsden, 1975, p. 5; Porter et al., 1973, p. 184; Anisef, 1973, p. 27).

(ii) Birth order (Porter et al., 1973, p. 63).

(iii) Language, ethnicity, and religion (King, 1968, p. 84; Fleming, 1975, p. 22; Breton, 1972, p. 149; Anisef, 1973, p. 12).

(iv) Type of school and program (Fleming, 1975, p. 45; Beattie, 1961, p. 33; Porter et al., 1973, p. 58; Clark et al., 1969, p. 59).

(v) Personality factors (Pike, 1970, p. 89; Young and Reich, 1974, pp. 20-25; Brehaut, 1964, pp. 11-12; Beattie, 1961, p. 29; Breton 1972, p. 113).

(vi) Financial aid (Council of Ontario Universities, 1971, p. 3; Cook, Dobell, and Stager, 1969, p. 3; Cook and Stager, 1969, p. 153; Porter et al., 1973; Marsden and Harvey, 1971, p. 12; Department of University Affairs, 1970).

Once again, the interactive nature of these variables was evident. For instance, the Porter study (1973) found that, once past 17, lower-order siblings are "less likely to go to university and the more likely he (or she) is to go to work immediately after high school", (p. 63). Furthermore, it was shown that families from low socio-economic backgrounds tended to have more children than those from high socio-economic backgrounds.

With respect to the role of "significant others", it was found that in a sample of Ontario grade 12 students, while the "educational plans of students are greatly influenced by the plans of their friends", among girls of low socio-economic status, "plans of close friends have virtually no effect on their plans to go to college" even when these girls are of high intelligence (p. 199). However, all boys and girls of high socio-economic background "were greatly influenced by the plans of their friends, regardless of intelligence level" (Pavalko and Bishop, 1966, p. 199).

With a more complex analysis, based on data from the Atkinson studies in Ontario, Williams (1972), using reference group theory, found that as male students move up from grade 10, the influence of parents in terms of educational aspirations increases over that of both teachers and peers (p. 122). His interesting interpretation was that:

> "If one can take response rates as indicators of knowledge, then the students know more about their parents' expectations than they do about their peers' aspirations and have least knowledge of their teachers' expectations. Moreover, it seems plausible to argue that the less one knows about the expectations/aspirations of a reference group the more one is likely to report them as being close to one's own aspirations."
>
> p. 122

For girls in grade 10, "the influences of the three reference groups follow that seen for boys", but "contrary to the situation for males, the aspirations of peers and teachers gain in effect over time at the expense of parents' expectations", (p. 124). When these sex differences are considered against the background of social class differences found in the Pavalko study (Pavalko and Bishop, 1966), the interaction grows in complexity.

The influence of high school counsellors, it must be pointed out, is considered very minimal by students (Porter et al., 1973, p. 209; Breton, 1972, p. 334). Also the finding that parents tend to exert relatively high influence over the students' educational aspirations becomes quite precarious when as one reviewer concluded: "Due to rapid changes, the knowledge that parents have is now of dubious value to their children", (Marsden, 1975, p. 5).

Granted that, within the Canadian context at least, a relationship exists between ethnicity and social class (Porter, 1965), additional factors such as language and religion become important with respect to educational aspirations. King's (1968) analysis of Ontario high school students revealed that while retention rates between grades 9 and 13 graduation were highest among students who spoke Yiddish at home (40.6%), and lowest among French-speaking students (3.25%) Ukrainian, Greek, Polish, Slovak, Hungarian, Italian, and Dutch-speaking homes produced students with retention rates similar to that of students from English-speaking homes (13.2%).

A more recent analysis in Ontario (Porter et al., 1973, pp. 227-239) revealed that when all forms of post-secondary education are considered, "Francophone and Anglophone boys had similar educational aspirations", which were higher than those for girls in the respective linguistic groups. However, an earlier nation-wide study done in 1965 (Breton, 1972) discovered an interesting trend for high school plans and post-secondary aspirations. In the first place, English-speaking boys and girls slightly outnumbered French-speaking boys and girls respectively in the number who planned to finish high school. However, this direction was unexpectedly reversed for students' plans to attend post-secondary institutions, with the greatest difference being between English-speaking (64%) and French-speaking (74%) boys.

The puzzling nature of these trends compelled the author, in a search for possible explanations, to control for mental ability and father's occupational status. The greatest differences between the two linguistic groups then occurred for post-secondary plans within the low mental ability and low father's occupational status groups, in favour of the French-speaking students. Breton suggested that these differences may have something to do with French students' rejection of their low group status and existing states of anxiety (pp. 151-159).

In line with these Ontario findings, American research (Rosen, 1959) further indicated that Greeks, Jews, and native-born white Protestants are more likely to possess higher educational aspirations than either Italians or French-Canadians. These differences persisted even when other factors, social class in particular, were controlled (pp. 47-60).

Again, with specific reference to Ontario, the Carnegie study (1956) found that Ontario secondary school teachers rated their Francophone students below Anglophone and "other language" students on the measures of reliability, cooperativeness, industry, physical stamina, energy and the probability of completing Ontario grade 13.

The Royal Commission on Bilingualism and Biculturalism (Second Report, 1968), in looking at the role of religion, hinted that while the religious affiliation of French students could have borne some relationship to the ratings of these teachers, most of whom "presumably were not French-Canadians"(pp. 88-96), such affiliation could not fully explain the high attrition rates among French-speaking students, especially as some "other language" groups of a similar faith had lower attrition rates. King (1968) agreed with this in his own analysis when he concluded that the religious affiliation of the French played a minimal role in the low retention rates of the French students. A Quebec reviewer (Copp, 1974) was even firmer in his statement:

> "No empirical evidence has ever been established that 'Catholic education' per se or education provided by members of religious orders is inferior or superior to 'Protestant' or 'State' education. A specific school may provide a 'better environment' for an individual child but anyone who goes beyond that generalization is simply stating his or her own preference."
>
> (p. 58)

Nothwithstanding the tendency by others to downplay the role of religion, Pike, (1970) observed that it is rather difficult to ignore the religious faith to which a student belongs and to which a school subscribes in the context of overall school climate (p. 91).

THE QUESTION GROWS: VALUES

As hinted earlier, the lack of causal interpretations and integrated research designs, as well as the interactive and possibly surrogate nature of variables, all helped give birth to a persistent controversy in the literature on post-secondary educational aspirations. Are such aspirations related to students' value orientations or financial resources? The Porter team (1973) put the question explicitly: "Does money matter?", to which they interpreted some of their findings to answer it "Yes", (pp. 61, 93, 95, 105). Another team (Cook et al., 1969) saw it this way:

> "It is our belief that the income rather than the cultural aspects of class should be the centre of attention."
>
> p. 89

But Cook and Stager (1969) ventured:

> "We would emphasize the importance of both factors, giving a slightly greater emphasis to the cultural aspects of class."
>
> p. 163

Even if, as the latter team proposed, that value orientation deserves greater attention, their notable assumption is that it is circumscribed by class, an assumption which, as will be later argued, may not be quite sound.

A study paper issued by the Ontario Department of University Affairs (1970) commented:

> "The economic climate during the sixties was improving while public acceptance of post-secondary education was growing. This, perhaps had some effect on the cultural influences that help to determine enrolment patterns of children from lower income families."
>
> pp. 4-5

This document implied: (i) cultural values affected enrolment patterns; (ii) these values could be favourably changed by financial improvement. In other words, money played an important role.

While noting that "a review of the literature on access to post-secondary education in Ontario emphasizes 'financial concerns'", two researchers (Marsden and Harvey, 1971) surmised: "Money isn't everything", (p. 15), with which the Council of Ontario universities agreed thus: "The results of numerous studies (in Britain and the US) seem to be leading to a preponderence of evidence that income, by itself, may not be a decisive or even primary barrier to accessibility" (p. 22).

In a further investigation of money per se as an instrumental factor in students' educational aspirations, one reviewer (Havigurst, 1962) concluded:

> "The principal reasons given by young people of above average intelligence for not attending college are lack of money and lack of motivation. No doubt these reasons are inter-related. There are relatively few high school graduates with high motivation for college who fail to go to college because they lack money."
>
> p. 28

This last comment, like the others, remains, in essence, a mere hypothesis. In Canada especially, there is a lack of systematic evidence to substantiate a conclusion like the one made above by Havigurst.

While great concern and differences of opinion obviously surround the issue, its resolution is crucial for Ontario's education policy as the preceding Council pointed out:

> "The weight given to student financial aid ... will much influence the degree to which student aid will in future be required to play a role in maintaining and improving equality of access. (This) will depend on the degree to which ... non-monetary factors are seen as responsible for the decision to continue or to forego study beyond the high-school level, and also the extent to which these non-monetary considerations are seen to be immune to any special features of a student aid plan designed to promote accessibility"
>
> (emphasis added) p. 25

The rationale apparently underlying the emphasis on finance in the present context is that students' aspirations for post-secondary education are linked to their perceptions of their ability to pay their way through. Now, while this link would seem a rather obvious one (after all, it takes money to attend university), the implications are disturbing when, as indicated earlier, significant proportions of intellectually able but financially disadvantaged students are left out of the university system. It is more crucial when those students choose not to attend university even when financial aid is available. If it is not finance per se but a particular value orientation, then the extent to which this orientation is class-bound or cuts across class divisions extends the unanswered questions. A further basis for this extension could very well be the fact that many well-off students also show no desire for university.

Financial aid and Educational aspirations

While it is not necessary here to review the historical development of Government's student aid programs in Ontario and Canada, or indeed the arguments for different aid plans[1], some reference to features of the present aid program in Ontario may facilitate an exploration of the issue of access, equality of educational opportunity, and educational aspirations.

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[1] Such reviews are contained in Cook and Stager, 1969; Council of Ontario Universities, 1971; Clark, Cook, Fallis, and Kent, 1969.

The essential features of the current Ontario Student Awards Program (OSAP) are:

1) Any person who is enrolled in a full-time course of study at an eligible post-secondary institution in order to qualify for a degree, certificate, or diploma is eligible to apply for assistance. All Canadian universities, other Ontario public post-secondary institutions, and several private institutions are recognized for this purpose.

2) To arrive at the financial assistance required, the financial resources which the student is assumed to have on the basis of information provided in his application are subtracted from the educational costs specific to his course and institution. The difference is the total award made.

3) To get an award without parental contribution, the student must fit the OSAP definition of "independence", and must provide a declaration of independence from his parent or guardian. According to the 1973 revised regulations, the student must be married or must have completed four successful years at a post-secondary institution. He is also considered independent if he is 24 years old, or if he has worked for two full years.

4) According to the 1973 regulations, the first $800 of the award is a loan, and the balance, if any, beyond $800 is a non-repayable grant.

5) The maximum that a student may borrow is $9,800 over the entire period of his academic training.

This plan, in terms of high school students' post-secondary educational aspirations, is important in at least two respects:

1) The major criterion for assistance is based on financial need.

2) The extent to which students are aware of these provisions could be related to their educational aspirations.

However, a review by Cook and Stager (1969) noted that:

> "not only are the upper incomes disproportionately represented in post-secondary enrolments, but also that the OSAP awards therefore must also go disproportionately to the upper income groups."
>
> p. 81

There seems to be a sex difference as well. For instance, in 1968-69, of the 54,000 OSAP recipients enrolled in Ontario's post-secondary institutions, female students constituted 31% of award recipients compared with 38% of their total enrolment (Cook and Stager, 1969, p. 78).

The other mitigating factor is students' perceptions regarding the cost of university attendance, and their knowledge of OSAP itself. Generally, it was found that high school students at all levels from grades 9 to 13 are relatively uninformed of the costs of post-secondary education. Moreover their impressions are inflated (Clark et al., 1969). This ignorance included parents as well, at least those of grade 12 Ontario students.

The following comment is therefore quite apt:

> "It is unfair that ignorance should be the basis for rationing the money that is available. If it is necessary to ration the money it should be on the basis of need. And it does not serve the principle of accessibility to have educational opportunities limited because of students' ignorance."
>
> Porter et al., 1973, p. 143

The Clark team further concluded that this ignorance of grades 9 to 13 students "was relatively independent of students' economic background" (p. 101).

The more recent analysis (Porter et al., 1973) showed that with a sample of Ontario grade 12 university aspirants, 65% from "the lowest class planning to go to university knew what the fees were, while only 58%

of those in the higher classes did" (p. 144). While it is not clear whether or not this difference was significant, one explanation offered for the trend was that money matters more to poor students who had to make extra efforts to acquaint themselves with university costs. Nevertheless, it would have been more interesting had achievement or mental ability scores been included in the analysis.

In the early high school grades, students' knowledge of OSAP fares just as badly as their awareness of university costs. In a 1969 Ontario sample (Clark et al., 1969) 60% of grade 9 students had never heard of OSAP. However, as grade level was increased, this ignorance was substantially reduced in that by grade 13, 86% had heard of OSAP and 76% could have correctly described the plan. This grade differential was subsequently confirmed (Porter et al., 1973):

> "It is worth noting, however, that "the ones that stand out as being best informed are high-achieving, low social class students in grade 10, and low social class students at all achievement levels in grade 12."
>
> p. 175

Conclusions differ on OSAP's effects within the high school. The Clark study (1969, p. 106) concluded: "It appears that even a well publicized program such as OSAP does not penetrate to the lower grades." On the other hand, others (Porter et al., 1969, p. 178) felt, "The message seems to be getting through most strongly to the ones who need it most."

Even in the midst of this difference, there is at least one discomforting implication. As could be gleaned from earlier-cited research, there is a proportional decrease in the number of lower class students who continue from earlier to later grades in the high school. The relationship between OSAP and students' social class was brought out by the Council of Ontario Universities (1971):

> "We believe the effectiveness of a student aid program is the degree to which the socio-economic mix of the post-secondary enrolment approximates that of the society as a whole."
>
> p. 3

More particularly, post-secondary education aspirations are forged, to a crucial extent in the lower grades (Clark et al., 1969). For instance, in grade 9, 19% of poor students expected a post-secondary education as opposed to 58% of those from well-to-do families. Furthermore, 40% of all students in grade 9 admitted that their post-secondary decision had been made "a long time ago", p. 101.

This suggests that the time of decision in the midst of forging values and other socialization forces, has to be considered alongside any analysis of OSAP's role in the high school. One report, after considering the available evidence, concluded:

> "In its present form the student aid program in Ontario benefits those students who have made the decision to undertake post-secondary studies. Since in many cases this decision is taken well before the student graduates from high school, the influence of OSAP in the decision-making process is questionable."
>
> p. 29

Considering the previously suggested role of cultural values, one may further ask, how far would monetary aid go towards facilitating the entry of more financially disadvantaged but able students into post-secondary education? In the first place, one ought to find out to what extent students are prepared to borrow.

Some Ontario studies argue that students from the lower-socio-economic levels seem very reluctant to get into debt and less likely to aspire to university if the only aid is in the form of loans (Committee on Student Financial Support, 1970; Council of Ontario Universities, 1971;

Clark et al., 1969). However, it was subsequently specified (Porter et al., 1973) that the amounts students were prepared to borrow was directly related to their post-secondary educational plans. More specifically, when the social class background of university aspirants was considered, differences in loan amounts were minimal.

Controversy: Value Orientation or Financial Aid

The interesting observation from all this is that university aspiration apparently accompanies a host of other values possibly shared by students from different social classes. Breton (1972) underlines the point: "Both socio-economic status and attitudes apparently have an independent, cumulative influence on educational intentions" (p. 164).

This further suggests that the constellation of values accompanying university aspirations may not necessarily be as circumscribed by social class as has been argued by some, but cuts across class boundaries. What some of these values are and the extent to which they are distributed across class divisions are questions which have not been adequately treated in research. There is some support for further inquiry in that when achievement level is considered within an Ontario grade 12 sample, "the amount students were prepared to borrow was related to their level of achievement but not to their social class" (Porter et al, 1973, p. 162).

Furthermore, when students' self-concept was analyzed, it was found that "students are more influenced ... by their academic performance and their belief in their own ability than by their social class" (p. 164). So far, these conclusions, based on students who had already committed themselves to university ignored (1) the earlier grade levels at which post-secondary or more specifically, university aspirations are forged, and (2) those from the different social classes who held no such aspirations.

When the latter group was considered, "getting a job" seemed by far more influential than "lack of money", with the low socio-economic groups choosing both reasons slightly more than high socio-economic groups. Still, the role of money in the reasons offered is difficult to ignore - especially from the students' viewpoint - since both responses reflect financial need.

Even so, money was perceived more as an obstacle by girls than boys (Porter et al., 1973, pp. 173-174). This underplaying of money as an influential factor in not continuing to post-secondary education was supported by another Ontario study (Anisef, 1975). From a Canadian sample of 76,000 students (Breton and MacDonald, 1967), it was found that while just under 10% believed that they would definitely or probably leave high school before completing their studies, only 6.6% of this group gave financial problems as their main reason.

In a Nova Scotia project (Connor and Magill, 1965) only 10% of the 609 students questioned perceived lack of money as a reason for their friends' dropping out, while 40% perceived "a desire to earn money" as a reason. However, the fact that 71% gave "little interest in school work" and 22% mentioned lack of parental interest, influenced the authors to draw this profile:

> "It appears that the less intelligent student who has little interest in school linked with a desire to earn money and whose parents take little interest in his academic performance, is most likely to be a drop-out prior to the completion of high school."
>
> p. 61

As yet a further indication that financial considerations are less salient than commonly thought, another study of Ontario grade 12 students (Breton and MacDonald, 1967) found that only 14% of the students who had no university intentions or who were undecided, said that the guarantee of sufficient funds would sway their minds.

In looking at these studies, ambiguities in the questionnaires or the vague response tendencies of the students make the research which attempts to tease out the relative influence of financial resources only suggestive. The unsettled nature of the research is further aggravated by a very early Ontario finding (Fleming, 1957) that even if adequate funds were guaranteed to a grade 13 sample, 66% of those initially uncertain and 24% of those not planning to go, would agree to go to university (p. 31). While this analysis did not contain explicit controls for social class or achievement background, the author concluded:

> "It becomes increasingly evident that the obstacles to university education for outstanding students are complex and many-sided. Several of the factors relating to the family or social environment might easily sway a promising candidate away from university when money is enough. To a student whose parents are convinced of the value of higher education and prepared to urge him to make the most of his opportunities, and whose friends take it for granted that it is worth exerting a real effort to go to university, considerable sacrifices may seem in order. On the other hand, the student whose parents are lukewarm and whose friends have for the most part decided on other courses of action will probably take a much less favourable view of the prospect of several years of financial stringency and separation from friends. The student in the latter class does not necessarily lack the qualities of industry and persistence that would, along with intellectual ability, enable him to succeed in university."
>
> p. 28

Indeed, research linking students' aspirations with the quality of peer influence (Pavalko and Bishop, 1966; Breton, 1972), parental warmth and encouragement (Clark, Cook, and Fallis, 1975), and achievement orientation (Wyman et al., 1972), suggests that culturally induced values tend to counteract the availability of financial aid.

Some support for this value orientation viewpoint also emerges from American and British studies. In an extensive American review (Beezer and Hjelm, 1961), the authors, in attempting to estimate the relative importance of the "many contributory factors" impinging on students' post-secondary educational aspirations, concluded that of thirteen factors considered, "lack of motivation is probably the greatest single deterrent to college attendance by capable youth" (p. 38).

The Robbins Report on Higher Education in Great Britain (1963) pointed out that the proportion of university students from working class homes has remained at 25% of university enrolment since 1938, in spite of the introduction of a maintenance grants scheme. Jencks and Reisman (1968), after a discussion of the relative importance of financial aid, crisply concluded:

> "All in all then, we are inclined to be skeptical about theories that emphasize the high cost of attending college as the major obstacle, and to look for other explanations of the obvious relationship between class background and (educational) attainment."
>
> p. 121

One Ontario research team (Porter et al., 1973) aptly describes the subject as "A nagging question about which many people have opinions but no one has a complete answer" (p. 70).

It is quite possible that investigations into the relative importance of monetary or value factors have been fettered by conceptual inconsistencies, for after all, money matters to the extent that it costs something to attend a post-secondary institution; and values matter to the extent that it takes at least some interest in education to attend such an institution.

A SECOND LOOK AT THE CONTROVERSY

Let us re-examine the situation. In the first place, earlier citations indicate that Canadian and Ontario students from low income groups are under-represented at university (Bancroft, 1964, p. 25). A preliminary observation, at this stage, is that money seems to matter.

Secondly, there is evidence indicating that poor students, as a group, aspire less than rich students to a university education (Porter et al., 1973). Two implications arise: 1) Educational aspirations are related to actual educational attainment, and to this extent, poor students appear disadvantaged. 2) Students, at least in high school grades, seem to have some ideas, even if distorted, as to the costs of a university education.

While the accuracy of students' perceptions (Porter et al., 1973; Cook et al., 1969) seems evenly distributed across social class divisions, educational costs will matter more to poor students who, by definition, have fewer financial resources to begin with.

It will be recalled, however, that once the decision to attend university is made, more specifically, when other variables such as intelligence or achievement scores and self-concept are controlled, social class differences, with respect to willingness to borrow at least, are minimized. Moreover, one study revealed that some lower class students in their final high school grades, having made a decision to attend university, are prepared to borrow more than rich students (Porter et al., 1973).

Still, the variability within this relationship restrains firm conclusions in that "fully one-third of low socio-economic class students hoping to go to university would limit their entire borrowing to less than $2,000" (p. 169). In terms of decision-making, one also cannot ignore the earlier finding that of 858 high mental-ability students in grade 12, only 20% belonged to high social class while 45% were from low social class background.

These, and other findings, help to leave the entire picture somewhat shadowy. As stated before, however, some light could be shed if research should also focus on earlier grades where the student population tends to be less homogenous.

This re-examination is nevertheless haunted by the fact that social class divisions are "artificially constructed statistical groups in which individuals are placed on the basis of occupation, level of income or education" (Pike, 1970, p. 53). Some understanding of the relationship between financial availability, in terms of family income, and values could be gleaned from the following rationalization underlying social class stratification:

> "When people within a particular income range are grouped together, it will be found that they behave in ways different from people grouped together in another income range ... The further one class is from another, the greater will be differences in behaviour."
>
> Porter, 1965, p. 10

Pike extends the assumption:

> "Since the behaviour of an individual, and the attitudes and opinions which he holds are greatly influenced by his immediate social environment (i.e. where he lives, whom he meets, how much money he has to spend) and since his immediate social environment is to a considerable extent determined by his occupational income or level of education, it is not surprising to find that people classified in one occupational category or income group tended to behave differently from people classified in another."
>
> 1970, p. 54

Some of the relevant consequences of the above rationalizations are:

(i) Social class, value systems, and educational aspirations are related, and relationships, in terms of causality, depend on the perspective taken or level of analysis. Pike (1970) puts it this way: "If the educational sociologist is so minded, he may have a hard time isolating the direct effects of low income per se from the cumulative effects of those various cultural and institutional factors with which low family income is associated" (p. 99).

(ii) It seems futile to propose that money matters while values don't or vice-versa.

(iii) It is also a mistake to believe that the relationship between social class and values are exclusive or remarkably linear. As one reviewer warned (Pike, 1970): "Terms such as 'middle class' or 'working class' should simply be regarded as groups with certain social characteristics. They are not intended to be exhaustive social categories" (p. 54).

This further implies that while certain values may predominate at one particular social class level, these values may exist at other levels as well. The extent to which there are such values surrounding university aspirations, and their subsequent distribution across class divisions, remain, as was suggested earlier, a fruitful line of inquiry. This is a significant note, since there is some evidence suggesting that many high-ability, high social-class students hold no university aspirations. For instance, it was found that 20% of high ability Ontario grade 12 students from relatively rich families choose to leave school before grade 13 (Porter et al., 1973, p. 85). Although this can be contrasted with the 41% of poor students with similar ability it is substantial enough a proportion to earn some attention.

Some specific values considered

Some of the specific values or personality characteristics which are tentatively assumed to be related to post-secondary aspirations range from risk-taking and self-confidence (Clark et al., 1975, p. 84), lack of conviction (Council of Ontario Universities, 1971, p. 30), concept of time, and activistic or fatalistic orientation (Craft, 1975, p. 93), to a "theoretical or abstract cast of mind" (Pike, 1970, p. 84). Specifically, the Council of Ontario Universities, as one example, (1971) stated:

> "The Subcommittee regards as beyond question that one of the major factors encouraging the existence of a self-perpetuating, poorly-educated lower socio-economic group is the lack of conviction by students with such backgrounds that they should invest in higher education. If OSAP does not consciously provide for such encouragement, then it is not a scheme which addresses itself 'universally' to all Ontarions; rather, it speaks only to those who are already convinced of the values that the higher education policy presumes."
>
> p. 30

It is not yet clear, however, whether or not such characteristics or values are independent or part of a more inclusive value orientation. Indeed, some have suggested motivation is one such higher-order value characteristic and have thus discussed the implications rather extensively (Craft, 1975; Beattie, 1961; Pipher, 1962; Pike, 1970). Unfortunately, research is sorely lacking on this issue, especially within the Canadian context. In probing the role of motivation among Canadian high school students and university aspirants, one reviewer noted:

> "There is insufficient evidence available from Canadian sources to indicate whether class differences in motivation are more important or less important than class differences in income (or in scholastic performance) in helping to maintain the existing class bias in Canadian higher education."
>
> Pike, 1970, p. 119

However, evidence drawn from American research strongly suggests that "the prime cause of class bias in college entrance rates ... is 'motivation' " (Jencks, 1968, pp. 277-316). Porter (1965) urged that, in the context of equal education opportunity in Canada, more attention be paid to the "low levels of motivation presumably found amongst large proportions of working class children" (p. 5).

A study prepared for the Canadian Conference on Education (Beattie, 1961) hypothesized that while ability is important for post-secondary access and performance, "It is probable that the increased potential depends not only upon inherent capacity for learning, but also to a great extent upon increased motivation" (p. 5).

Notwithstanding the lack of "direct evidence" in Canada, Pike (1970), in making two important propositions, wrote:

> 1) "It seems likely that the main influence of class differences in motivation is felt in the high school grades prior to matriculation."
>
> 2) "In view of the tendency for Canadian high schools to apply somewhat more stringent academic screening devices than those used in American schools, it seems likely that the Canadian working-class student who succeeds in matriculating from high school will tend to be more highly achievement-oriented than his American counterpart. In turn, this possibility suggests that class differences in motivation may be smaller amongst Canadians than amongst American high school graduates and accordingly that they may play a more limited part in social selection at the university entrance level."
>
> p. 119

Another Ontario study, in supporting Pike's appeal for attention to pre-matriculation grades, argued that grade 9 was a critical grade with respect to the manifestations of motivational differences (Clark et al., 1969, p. 57).

Do different levels of motivation adequately reflect the "value orientation" mentioned earlier, or do they primarily relate to social class? There is some evidence to support the latter, but considering, as has been previously pointed out, that many high ability students from high socio-economic backgrounds in Ontario at least, choose not to go on to university, there is room for inquiry into factors other than motivation in studying the aspirations of poor and rich students respectively.

Renewed understanding: Value orientation

As Pike (1970) commented: "The assumptions underlying many sociological studies of class differences in motivation are indeed vulnerable to criticism"(p. 116). In citing relevant research, he went on to dispute the conclusion that "working-class parents are less ambitious for their children than middle-class parents, and similarly, that working-class children are less ambitious for themselves than middle-class children" (p. 116).

Some justification for Pike's skepticism comes from Turner (1964) who proposed "a ladder of mobility" wherein the index of ambition is not the aspired level per se, but the distance between this and the initial level as deduced from the students social-class background. In a further examination of the social class-motivation relationship, Scanzoni (1967) pointed out that:

> "there may be no genuine differentiation between the classes in the values attached to success, but rather the working class simply put less emphasis on success because they perceive the obstacles which bar the way to its attainment."
>
> p. 449

Gottlieb (1969), in an extended version of this proposition argues:

> "The observed alienation of the poor is not the result of a voluntary rejection of legitimate means or ends ... Their alienation is more a product of an inability to come up with the resources, materials, social and psychological requirements for middle class goal attainment than it is a rejection of middle class goals and values."
>
> p. 98

He concluded: "There are few referents who can help convince the youngster that there is a meaningful relationship between what he is being asked to do in school and his own goals", (p. 98).

It would appear then, that not only are there complexities in research execution and interplay of factors, but also conceptualization on the problem differs. In the first place, there is a school of thought which holds that social class depresses educational aspirations. Others propose that social class per se does not restrict aspirations, but that one's awareness of financial or other ascriptive barriers hinders the accommodation and development of high aspirations. Yet others argue that high educational aspirations persist in spite of financial inability or class divisions, and that the only thing really lacking is sufficient money to actualize these aspirations.

Pike underlined the second point:

> "It is reasonable to suppose, for example, that if working class students perceive the road to the universities as being closed to them, either for academic or financial reasons, then their motivation for success and achievement may either be blunted, or adjusted to the level of their perceived educational opportunities."
>
> p. 117

Still, the unsettled nature of this propostion persists, as another research team put it:

> "Different groups have quite distinct life patterns. Their values and ambitions differ from those of other groups ... Class, then becomes a term which has occupational, economic, and cultural implications."
>
> Clark et al., 1969, p. 80

Obviously, there are important differences in the perspectives discussed above, the most important being an emphasis on process as opposed to product variables in the relationships between motivation, social class, and post-secondary educational aspirations. It would require more than a questionnaire to determine:

> "whether or not limited aspirations are primarily the result of limitations imposed on the educational and occupation opportunities of a given group, or whether it arises from group adherence to a specific sub-cultural value-system."
>
> Pike, 1970, p. 118

In this same vein, Breton (1972) wrote:

> "The desire to go to college may or may not reveal a high degree of personal striving. Culturally, the goal is ranked relatively highly; but it is doubtful whether it reveals as much ambition for the very intelligent students, or for those from a privileged socio-economic stratum compared with those from a deprived family background."
>
> p. 123

This extended argument not only supports Turner's proposal of a "ladder of mobility", but further suggests distinctions between ambition, opportunity, and intelligence. Breton, in supporting Pike's view, then concluded with a most provocative point: "The accessibility of a goal for different individuals is important to the validity of the concept of ambition" (p. 123).

Throbbing throughout this perspective is the implication that a poor student with university ambitions is spurred on by a greater amount of motivation than a rich student with similar ambition. Investigation within this context would obviously require a different strategy than traditional surveys. Furthermore, it would entail a second look at motivation within the monetary-value controversy; a look especially based on Merton's (1957) contention that analysis of aspirations requires data on the "acceptance of the goal and norms as moral mandates and internalized values" (p. 175).

Thus, two separate issues for analysis emerge here. First, the measurement of ambition. Second, identifying the extent to which students incorporate socially valued goals. Another alternative is to obtain measures of ambition which are independent of specific goals bearing cultural differentials. Conceptually, then, the relationship between values and educational aspirations are difficult, yet interesting to pursue. From a research point of view, it remains a potentially rewarding area.

Renewed Understanding: Financial Ability

Within the framework of this discussion, it is also useful to make some distinction between financial availability in terms of family income and financial aid available or perceived as being available from an outside agency by students.

It is true that in current Ontario aid programs, some consideration is taken of family income as a source for financing students' education. Parents' choice and values, as one study noted (Porter et al., 1973), bear some additional direct influence on students' post-secondary plans.

However, the research focus, tentative albeit, has usually been on the general question: Given some guarantee of adequate outside aid, to what extent would students, especially those from low income groups, aspire to a university education?

In one study (Clark et al., 1969), a sample of grades 9, 12, and 13 Ontario students who had no initial post-secondary intentions were offered "enough money" as an inducement to change their minds. It was found that this offer ranked third as a reason for those who were willing to change their minds. "Never thought about it", and "Yes, if I need more education to get ahead in my job", ranked first and second respectively. Social class measures and lack of ability or achievement scores in this study leave the issue somewhat blurred. Furthermore, no distinction was made as to the specific forms in which "enough money" would be supplied (e.g. grant, loan, or scholarship). Also, no classification was made within post-secondary institutions. Breton's (1972) approach to the problem also suffers from some of the shortcomings described above.

When these weaknesses are found in studies using only those who are still attending secondary school, one senses the need for a stated set of minimum requirements for further studies. Some of these could be:

i) adequate representation of different grade levels
ii) adequate representation of different social class levels
ii) adequate representation of ability or achievement levels
iv) measurement of the extent of commitment to post-secondary education
v) identifying type of post-secondary institution aspired to
vi) specifying the exact form of financial aid offered.

Other problems of a more psychological nature exist when one recalls the processes of and research on commitment and decision-making (Becker, 1966), cognitive consistency (Feldman, 1966; Festinger, 1957), and attitude change (Sherif et al., 1965; Zimbardo and Ebbeson, 1969), aspects of which appear quite necessary for consideration in any solid investigation of social class and post-secondary educational aspirations, but which have so far been unfortunately ignored by a more sociologically-oriented line of research.

Essentially, attention to these areas could well clarify, for example, the extent to which a lower-class student may experience psychological discomfort in pursuing an educational goal which may be outside his social class frame of reference.

COMMENTS ON METHODOLOGY

By and large, Ontario and Canadian research on students' post-secondary educational aspirations has depended on questionnaire surveys and as such remain vulnerable to all the limitations which accompany such a strategy. These drawbacks include the problem of socially desirable responses, imposed or restricted choices and questionnaire ambiguities. Furthermore, when students' intentions are linked to actual behaviour, a number of difficulties arise (Anisef, 1974, p. 2) among them variations in commitment, time interval between intentions and behaviour and inadequate measures of intentions.

Moreover, the samples studied for educational aspirations scarcely take any account of those who had already left the high school system. Also, lacking in the traditional research are experimental or interview approaches. It would appear that, considering the acclaimed subtlety and complexity of the social-psychological processes related to post-secondary educational aspirations, a useful strategy would be to use the questionnaire survey, experimental and interview approaches in supplementary fashion, or as an extended design.

Specifically, such an integrated format could also be fruitful in teasing out the relative influence of monetary and cultural factors on different socio-economic groups. Sometimes in survey designs it is not possible or necessary to do statistical tests which reveal the extent of variance within a sample. But the consistent lack of indicators of variance has allowed for some ambiguities in interpretation. Trends, averages, or simple percentages do not always tell the whole story.

These comments do not imply that shortsightedness and inelegance were the hall marks of research on educational aspirations. Rather, the situation testifies to the difficulties and complexities of conceptualizing, sampling, and executing research on such a multifaceted issue. Still, it is essential to bear these shortcomings in mind both in considering actions which educators might take and in considering directions for further research.

For instance, the assumptions which have generally underlined previous research, really cannot go unchallenged. It is usually assumed that students have one level of aspiration. Degrees of preference or perceived chances of attainment were not generally provided for, at least in Ontario and Canadian research.

One American team (Rodman, Voydanoff and Lovejoy, 1974), in an attempt to strengthen their methodology, put it this way:

> "While our research methods may never capture all of a person's mixed hopes and emotions, we can at least move beyond the concept of a level of aspiration to the concept of a range of aspirations."
>
> p. 184

After combining various educational levels into groups, this team based their measure of aspiration on two criteria:

i. The highest educational group to which the student aspires in terms of high, medium, or low levels.

ii. The total pattern of groups to which the individual aspires -- for example whether the adolescent aspires to only a single group or to several groups of educational achievement.

These two criteria have been used to determine whether the student has a "narrow or wide range" of aspirations. They also made it possible to categorize a student's response, as, for instance, high-level narrow range or low-level narrow range.

This strategy is both theoretically and empirically useful. It brings to the fore the concept of "value stretch" and its possible relationship to social class, sex, or ethnic groups. The theory attached to this concept (Rodman, 1963, pp. 205-215) holds that members of the lower class share the dominant values of the society, but "stretch" these values downward because they frequently do not have the resources that would enable them to achieve in accordance with the dominant, or middle-class, values. Essentially, this implies that lower-class persons do not necessarily abandon the dominant values, but they may modify them so that their values are in consonance with their behaviour (Festinger, 1957).

In order to counteract socially desirable responses, another study (Karmel, 1975) constructed five questions which enabled the student to state his or her perceived chances of success on a probability scale ranging from 0/10 to 10/10. While the content of the questions and sample characteristics remain inadequate for the present context, the use of a probabilistic format strongly suggests another way to improve research tactics for investigating students' post-secondary educational aspirations. Moreover, Karmel indicated her subjects' satisfaction with her "realistic" format as opposed to other traditional methods. The author also noted that the probability scale reduced "social desirability contamination" and afforded a "closer approximation to interval data than that provided by content analysis or categorization techniques" (p. 63).

It must also be noted that research strategy is forged on the theoretical assumptions one makes about the relationships between educational aspirations and students' value orientations. Consider Pike's (1970) hypothesis

> "I would not like to give the impression that problems of educability and talent loss are limited just to children from the lower socio-economic groups or from certain ethnic or racial minorities. The problem is most marked amongst children in these groups, but middle-class children are not immune from the wastage syndrome."
>
> p. 174

At this point, his view is consistent with earlier findings. He then introduces a tentative research strategy:

> "It is interesting to speculate on the hypothesis, occasionally made, that problems on school drop-out and educability amongst working-class children have to be examined in sociological terms - i.e. we would look at the child's social environment to establish causes - whereas with the middle-class child they are largely a matter of individual psychology - i.e. we can expect his social environment to favour school success and retention so we must look at individual psychological capacities and difficulties to account for failure at, or withdrawal from, school."
>
> p. 174

With social class as the independent variable then, the suggestion is to construct the dependent variables within two separate theoretical perspectives.

The research discussed in this paper has generally equated intentions which students expressed with their actions in the future. The extent to which this strategy is successful in explaining thought processes and actual behaviour will go a long way in determining the validity of the research. Take the case of grade 10 French-speaking students who significantly outnumber the English-speaking students in agreeing that "the most important qualities of a real man are determination and driving ambition" (Porter et al., 1973, p. 237). Yet when it comes to retention rates from grade 9 to grade 13, French-speaking students fare most poorly -- 3.2% retention rate versus 40.6% and 13.2% for Yiddish and English-speaking students respectively (King, 1968, p. 88). Moreover, when their educational aspirations are considered, the differences fail to reflect their greater emphasis (Porter et al., 1973, p. 238) on "determination and driving ambition" or "getting ahead in the world."

This situation is not confined to French-speaking students. Responses from similarly positioned Negro students in the United States reflect a similar pattern (Sherif and Sherif, 1964, p. 211). In trying to fit these facts — unexpected from a social learning viewpoint — into a theoretical framework, explanations ranged from "subordinate group phenomenon" to "modes of dissociation" (Antonovsky and Lerner, 1959, p. 136).

The latter explanation glows with psychoanalytical implications. This discussion does not deny the existence of handicaps on lowly-placed students or the "value stretch" concept. What it implies, as Korner (1946) p. 333), had suggested, is that "The wish to deny *the existence of a handicap* is so great that students develop compensatory mechanisms in order to convince themselves and others that they really have no special limitations."

This hypothesis can also be aptly applied to Rubin and Zavalloni's (1969) study of Trinidad youths in which low status students entertained extremely high aspirations. An alternative, however, could be that in spite of low socio-economic background, youths have acquired "appropriate" value orientations forged by other peculiar social conditions.

Generally then, there seems to be no overall theory to accommodate a study of post-secondary educational aspirations. One would have to state a conceptual framework, collect evidence, and then be prepared to modify the original framework if the facts so dictate.

The foregoing examples are used to indicate that while traditional investigation into students' post-secondary educational aspirations contains certain methodological and conceptual weaknesses, there exist suggestions for improvement, especially in terms of tackling the unsettled issue of the role of financial and cultural factors.

THE IMPORTANCE OF LOCAL RESEARCH

While, as far back as 1945 (Canadian Youth Commission, p. 35), the call for some understanding of educational aspirations within Canada had been made, the research emphasis, for a long time, remained confined to rates and causes of dropping-out in high schools across the different provinces (Vincent and Black, 1966; Cheal, 1963; Canadian Education Association, 1950; Hohol, 1955; Connor and Magill, 1965).

Within these periods though, the call for work on students' post-secondary educational aspirations resurged with intermittent vigour. In 1957, one committed researcher, (Fleming, 1957), in having to base his conceptualization extensively on American studies, regretted this state of affairs and implied the need for systematic local research (p. 4). He subsequently participated in one of the pioneering Ontario efforts on the subject (Atkinson Study of Utilization of Student Resources, 1956), but still went on to write in 1965:

> "It must also be kept in mind that most of the thousands of studies reported have been carried out in the United States. It is characteristic of this type of study that local factors play an important part ... It is hard to discover a creditable reason why investigation in Canada should have lagged behind."
>
> Fleming, 1965, p. 8

There were those who advanced specific reasons for stepping up Ontario and Canadian research (Breton and MacDonald, 1968, p. 269). One team (Pavalko and Bishop, 1966), based their appeal on the premise that the Canadian educational system is "less egalitarian and more elitist" than that of the United States. Evidence for this premise comes from the fact that 20% of the normal 1951 college age group had enrolled in college in the United

States as opposed to approximately 5% for Canada (Jackson and Fleming, 1957, p. 82).

Writers of the same period (Naegele, 1964; Lipset, 1964; Wrong, 1955; Porter, 1967) have described the Canadian national character as a conservative syndrome. In comparison to the United States, Canadians are perceived by these writers as being more likely to adhere to elitism rather than egalitarianism, ascription rather than achievement, particularism in contrast to universalism, and diffuseness, rather than specificity. In terms of educational aspirations, equality, and public demands, Fleming (1974, p 27) makes a crucial point: "Canadians appear to have a higher tolerance for inequality in general than do their neighbour Americans."

To the extent that these characteristics are believed to affect the values of our youth, it is necessary to conduct Canadian research before hastily accepting findings from other regions. However, whether or not such generalizations on values are applicable to a socially and culturally diversified region as Toronto remains an empirical question.

Other researchers stressed the need for Ontario studies, particularly in light of important educational, economic, and demographical changes within the province (Cheal, 1963, p 137; Porter et al, 1973, p x). Statistical comparisons in terms of high school retention, matriculation, and university enrolment rates tend to support the latter appeal (Pike, 1970, pp 25-27). One study argued for Ontario research (Marsden and Harvey, 1971) if only to confirm, given local conditions as they are, that the findings from elsewhere are "true of Ontario as well" (p. 17).

Pike (1970) in going further, warned of the possible dangers in applying to Ontario and Canada, the findings from outside regions. Not only that, but some of the relevant research stretches back to the fifties and could very well be updated to maintain some validity.

If the arguments for Canadian and Ontario research are so strongly put forward, then it is justifiable, on the basis of social structure at least, that Toronto conduct some relevant research of its own on post-secondary educational aspirations. Indeed, the diversity of student population and academic structure of Toronto (Buttrick, 1972; Wright, 1970, 1971, 1972; Wright and Ramsey, 1970; Danziger, 1975; Maykovich, 1975) sharply justifies more local research. Two reviewers (Jackson and Fleming, 1975, pp. 85-88) noted that while "Provincial and therefore regional differences in the matter of school attendance are quite great", they went on to show that Toronto, in terms of high school and post-secondary enrolment, ranked thirteenth and eighth respectively among all major Canadian cities (p. 86).

In terms of population diversity, it should be noted that one-quarter of all students in Toronto schools were not born in Canada or more generally, "English was not the mother tongue of over 40 per cent of the students in the Toronto school system" (Wright, 1970, p. 9). It was also specifically found that 43% of the students in "non-inner city schools" enrolled in the 5-year Arts and Science program as opposed to 25% of the students in "inner-city" schools (Wright, 1972, p. 10). Considering the relationship between program and university enrolment, this finding suggests a relationship between university aspirations and school location within the Toronto area.

Also, non-Canadian born students in at least one Toronto High School (Hambleton and Houseley, 1967) gained more favourable academic and achievement assessments than Canadian-born students. On the basis of this and other preceding trends, the argument for Toronto research into students' post-secondary educational aspirations remains defensible.

DISCUSSION

This paper is essentially a review of the literature of some of the specific factors related to students' post-secondary educational aspirations primarily within the Ontario and Canadian context. It goes on to raise some of the pertinent theoretical and research problems which have haunted previous investigations, and opens up areas for further research. Finally, justification for local research is presented.

Generally, it seems that while exploration of specific or isolated factors related to educational aspirations is useful, there is room for investigation based on the wider value orientations which students may entertain in their formation of educational aspirations. Indeed, much of the complexity surrounding the factors related to post-secondary aspirations may be due to the lack of such comprehensive variables as cultural values — a study of which could be more meaningful.

This possibility is quite consistent with an argument linking students' world view to their educational aspirations. Craft wrote:

> "All too often what might be regarded as more superficial aspects of life-style (e.g. the degree of home-centredness) or conveniently quantifiable demographic data such as family size are regarded as determinants of behaviour when it is possible, that they are merely reflections of deeper, and perhaps largely implicit assumptions about the nature of the social and physical environment.
>
> "It can be argued that insufficient attention has been given to these deeper levels of belief as sources of motivation, not only in educational researches, but also, for example, in stratification studies."
>
> Craft, 1975, pp. 93-94

A pivotal point for such investigations could very well be the relative influence of monetary and value factors in the students' decision-making process and an examination of the grade levels at which values are influential.

Permeating the discussion has been the ideal of equal educational opportunity. While the intricate and extensive philosophical implications of this ideal are not within the present scope of this paper, the following quote (Anisef, 1974) indicates how research designs are crucially shaped by one's perspective:

> "If representatives of school systems in Ontario wish to broaden the scope of their students' educational horizons, they must realize and understand the complexity of the task. They must realize that an adolescent's milieu, the social-psychological support he receives, and his self-evaluation all interact to produce educational and vocational decisions. Procedures must then be developed to learn more about who specifically can profit in what ways and how much of what kind of higher education. To encourage all adolescents to broaden their educational horizons would be foolhardy and inappropriate."
>
> p. 130

A report commissioned by the Ontario Provincial Government (1968) reflects the same position when it advocates that "every child have the right to the best possible learning experience commensurate with his needs, abilities and aspirations" (p. 170).

On the other hand, other researchers (Porter et al., 1973; Cook et al., 1969) prominently argue on the point "who specifically can profit." Their concern is not only how to handle those who show themselves as able and willing, but extends to considering why the able and willing are so disproportionately distributed across social class. To the extent that practical considerations of the issue of educational aspirations and attainment will remain hooked to public policy and a limited number of post-secondary places, the dilemma posed by Jackson and Fleming (1967, p. 75) "who goes to university" versus "who should go to university" is more than mere rhetoric.

Two implications immediately arise. One, in view of the universities' desire to accept only the "best" applicants, how able must "able" be, and in what terms (e.g. grades, creativity, persistence?). The point is that even among the "able and willing" some might have to be left out if university places are limited by the selection procedures. This argument also implies that if an able student chooses a personally satisfying alternative to secondary education this is in some way "a wastage of talent." It is hard to believe that post-secondary education is the ultimate goal in our society. Furthermore, CAATs and universities are not viewed as equally valued alternatives.

This introduces the second implication. Willingness to attend university then becomes the critical disposition -- not ability alone -- especially when university credentials are pervasively recognized by the school system as steps for social mobility, or as channels for social privilege and self-esteem. It is obvious that the earlier list of mitigating factors such as sex and geographical location can be seen as crucial elements that limit "willingness" even where there is ability. That willingness (i.e. aspirations) to attend university is disproportionately distributed across social class divisions thus provokes educationalists to consider the forces which impinge on the formation of such aspirations. Possibilities and restrictions of intervention also arise. The ethical matters of interfering with family socialization, peer influences, and students' lifestyles do need delicate treatment. Furthermore, should educational policies also be directed towards those rich and able students who entertain no university aspirations? The problem of accessibility then affects not only financially disadvantaged students, but as Pike earlier indicated, students from high social class backgrounds as well.

Thus, there are two major questions to be answered:

i. Why are more able and willing students not attending university?

ii. Why are more able students not willing to attend university?

Finally, it must be noted that this paper omitted other attendant issues. For instance, the relationships between educational aspirations and the changing occupational and income patterns in Ontario is not mentioned. No consideration has been given to the old argument of "liberal education" versus "skill-training". The CAATs and their status and role in comparison to universities have received little attention in the available research.

The paper has only hinted at the importance of an individual's personal satisfaction in making his choices for the future.

It is our conclusion that any future research should focus on the ways in which the process of choice occurs and should consider the value systems within which such choices are made.

SUMMARY

What We Know About Post-Secondary Aspirations

It is now fairly easy to recognize that social class and sex are two variables prominently related to both students' post-secondary educational aspirations and their actual enrolment. In Toronto, as in many other regions, there are generally more lower-class than middle-class students of high ability in absolute numbers in the early high school grades at least. However, a smaller proportion of lower-class students aspire to attend university and an even smaller proportion actually do attend.

Being both poor and female depresses the likelihood even further. It must be noted, however, that these groups enter other forms of post-secondary institutions, such as CAATs, in substantial numbers, usually in greater proportion than that of middle-class students. Obviously, both filtering and chanelling systems are at work in the province.

We have also shown in the preceding review that language, ethnicity, location of residence, ability, family size, birth order, information access, type of high school and program, personality traits and the role of significant others, are some of the specific factors related to post-secondary educational aspirations. While some of these relationships (e. g. family size, self-concept, ability) are rather expected, there are complexities which warrant a second look.

With the notable exception of students from Yiddish-speaking and French-speaking homes, no consistent relationship between language background and educational aspirations has been demonstrated. While large numbers of students from French-speaking homes hold high post-secondary educational aspirations, their attendance rate at university is much lower than their aspirations would warrant. The discrepancy for males is greater. However, students from Yiddish-speaking homes have both high educational aspirations and proportionally high university attendance rates.

Students in rural areas tend to have, as a group, lower educational aspirations than their counterparts in urban areas. Apart from the other psychological and sociological forces previously discussed, the availability of post-secondary educational facilities in the city areas contributes to the difference.

In large measure then, to say that any one of the above variables sufficiently explains students' educational aspirations is indeed a half-truth. Instead, one of our soundest conclusions is that these variables interact to such an extent that no single one can, by itself, give an adequate explanation of the formation or presence of students' post-secondary educational aspirations. One study (Career Decisions of Newfoundland Youth, 1974) concluded: "A student in a family of eight children was less than half as likely to attend university as was his counterpart from a family of three children or less" (p. 184). However, one cannot state unequivocally that a student from a large family would be less likely to aspire to university. As Breton (1972) noted: "While the size of the family is negatively correlated with educational intentions, the effect of family size is somewhat reduced when socio-economic background is controlled" (p. 386). One would even have to consider residence and birth order as well. First borns from rich small families living in urban areas are most likely to aspire to and attend university. The likelihood increases if the student is male.

Another conclusion is that while students may have high ability and perform well academically, this is not enough to develop university aspirations. It is necessary for such students to see themselves as being "bright and capable of performing well."

Since it has been shown that the poorer the student, the less likely he or she is to entertain a high self-concept, we are moved to recognize relationships among social class, self-concept, ability, and performance on the one hand, and post-secondary educational aspirations on the other.

We also know that the Government's aid program is not having the desirable effects at the early high school grades where it seems educational decisions are forged. Money is available, but many students do not seem to know how it could be involved in their educational decision-making. Furthermore, both the students in these early high school grades and their parents have inaccurate perceptions about the cost of higher education.

We are impressed that money does matter, at least to the extent that a student's aspirations are related to his or her family's income. But we cannot ignore the fact that a substantial number of students from well-to-do homes also do not entertain university aspirations. Moreover, the presence of high ability in the latter group does not necessarily lead to high post-secondary aspirations.

There is also some indication that even when poor students of high ability get some financial guarantee, their decision "not to enter university" is substantially unchanged. The provision of money in itself may be a necessary but certainly not a sufficient condition for evoking or enhancing students' post-secondary educational aspirations.

Students' college plans are generally related to those of their friends. However, one study found that girls from low socio-economic groups in two Ontario towns were not influenced by their friends' college plans. Perhaps these girls have different friendship patterns from other teenagers. Generally, the only evidence about the role of peer groups can be interpreted as "birds of a feather usually flock together" just as easily as saying "teenagers always say and do what is the fashion among their friends."

Most of the above conclusions are based on trends or group comparisons. This, in no way, should detract the teacher from giving the individual student of whatever social-class or sex full consideration based on the merits at hand. Not all poor students have low educational aspirations. Not all girls have low educational aspirations. The same applies to students from rural areas, from large families, or from non-Anglo-Saxon backgrounds. We ought to resist the "expectancy" syndrome.

It is clear there is a disheartening gap between the policies of equal educational opportunity and the realities in Ontario and Toronto in particular. Matriculation and university attendance trends certainly do not match Ontario's reputation as Canada's richest province.

There is a difficulty in determining whether or not students' aspirations are entertained with personal satisfaction. As discussed earlier, there are those who, in this case, question the utility or long-term value of "personal satisfaction" when it seems to set limits on social mobility or income potential. Who decides? There is no easy answer.

It would help though if we recall that grade 8 is a critical level for a student's academic future. It is here that he or she decides on program and courses which may or may not lead to university or CAAT entrance. While the decision ultimately rests with both student and parent, the school can ensure at that time that the present options and future possibilities are clearly placed within their decision-making domain.

What We Don't Know about Post-Secondary Aspirations

Research is somewhat lacking in the ways whereby students' educational aspirations are formed. In other words, the processes (as opposed to structural variables such as sex, age, or family size) involved in the formation of such aspirations are a relatively unexplored field. Of course, there have been suggestions that factors such as parental and peer influence do contribute to students' eventual aspirations. But the nature of the underlying social processes by which these factors are transmitted is not yet quite clear.

We do not, for instance, have a systematic understanding of what types of values or subtle reinforcement students derive from their parents towards the formation of educational aspirations. We can, however, anticipate relationships between students' educational aspirations and extrapolate for example, from the presence of other university-educated members within his/her family. But as to the way in which students' aspirations become limited or enhanced by family values, we are left in some doubt.

Where and how students' educational aspirations are influenced by either financial resources or indigenous value orientations remain of critical importance to both teachers and policy-makers. It is, unfortunately, a question so far unresolved in the research literature within Canada at least. Going along with the idea -- as many Ontario policy-making bodies are currently doing -- that increased financial aid is the panacea for equal educational opportunity, according to some educators, could very well be a wild goose chase.

Given a guarantee of financial help, to what extent would an able student, especially a poor one aspire to university, or change his decision from not going? The answers provided by the research remain controversial. Moreover, the extent to which this financial guarantee is related to ability (or more crucially, the development of ability) is also unanswered.

In addition to this, there are at least three different ways of interpreting the relationship between low socio-economic background and the absence of post-secondary educational aspirations.

One possibility is that such students are systematically socialized into having low educational aspirations and values consistent with such aspirations. There is no psychological tension here. They are content to stay in place, not having had high educational aspirations in the first place. A second possibility is that students recognize but reject high educational aspirations and the values accompanying high educational aspirations for alternatives they see as personally satisfying. In this case there is an adjustment which dissipates potential tension. The final possibility is that these students actually have high educational aspirations and the accompanying values but, recognizing the numerous social and economic barriers, feel compelled to suppress these aspirations. This is a tension-producing situation which results in frustration. All these possibilities likely can be found in some degree among students from low and modest income families. A similar three-part approach can be used to look at female and rural students.

Post-secondary aspirations are separately related to factors such as residence, social-class, sex, and family size. However, we are faced with the possibility that there are underlying value orientations cutting across each of those values. In other words what appear to be mere signals could be integrated by more encompassing variables. This, however, we are yet to confirm empirically.

Basically, two major questions arise in terms of social class and accessibility:

1) why are more able and willing students not attending university?

2) why are more able students not willing to attend university?

Some argue that a university place should be provided for all those able and willing. Others are concerned about why and how such willingness is distributed across social class divisions. While the former deals with accessibility, the latter question is directed at the broader issue of social stratification and the acquisition of functionalist values.

Nevertheless, university attendance will not always be seen as suitable or satisfying by all of the most "able". Furthermore, how able must "able" be in light of a limited number of university places?

Is grade average a sufficient or the most efficient way to determine ability or university places? Are the results on some external tests a sufficient or the most efficient way to determine ability or university entrance? Considering the role of personality factors, the answers seem to be "no".

So far, a judgement from an external source has been imposed on the students' educational choice. We are still left to wonder exactly how the students themselves see the worth of their post-secondary aspirations. Does he or she feel deprived by aspiring to CAAT? Is "going to work instead" an aspiration held with a satisfaction as full as that of another aspiring to university? For this and other reasons, the "psychology of aspirations" remains a relatively virgin area. To tackle this issue, we would have to decide how to relate students' actual feelings about his or her aspirations to the social implications of the aspiration (e.g. social mobility, the prestige value of a degree, and the society's need for plumbers or auto mechanics).

Obviously these questions help to remind us that students' educational aspirations cannot be adequately treated outside the social system in which they live. Why, for instance, is it a "wastage of talent" for a high ability student not to go to university? Can this talent be exercised in society only through university education? Furthermore, what criteria should be used to select the student whose educational aspirations ought to be modified?

The Role of the School

There is a growing sensitivity in Toronto towards the role of the school in the community. Moreover, in terms of both school board policy and community expectations, the school cannot be absolved from some responsibility with respect to students' post-secondary educational aspirations.

Evidence from this review suggests that the school's message must start early and extend beyond the classroom. It is not expected that schools will tell all students they could or should go to university. What the school should attempt, for example, is to ensure that this possibility is not discarded prematurely.

In fact, a publication by the Toronto Board of Education — "Role of the Public School Counsellor" — hints at this objective. It stated:

> "The counsellor helps to ensure that each child receives optimal benefit from those educational opportunities available for him.
>
> "The counsellor assists each pupil and his parents in the selection of an appropriate secondary school program in the light of the pupil's abilities, achievements, interests, and aspirations." (emphasis added).

These objectives generally reflect the current concerns of the Board with respect to the improvement of "students' accessibility to post-secondary education" in Toronto. However, the evidence in this review offers some direction for consideration by schools.

In the first place, the limitations of a school system must be recognized. It is clear, for instance, that the social class, sex, or place of residence of a student is related to his or her educational aspirations. But a school system cannot change a student's sex. It cannot change a parent's occupational status. Neither can it change where a student lives. However, the research overview does suggest that these students may not have an adequate understanding of the range and implications of available educational options. Furthermore, these is evidence to suggest that students do not have a clear picture of the costs of different types of post-secondary education. If the school policy is indeed to let the student receive "optimal benefit from those educational opportunities available" then it follows that these "opportunities" in terms of range and social implications (e.g. jobs) must also be made as explicit as possible.

In view of available financial aid programs, students from poor homes must be convinced that any perceived financial barriers are not insurmountable in going on to post-secondary education. The growing feeling that available aid programs are deficient is also relevant. Financial support for tuition and books is one thing but, as some argue, such support should be improved for other necessities (e.g. food, transportation, clothing) which accompany a post-secondary educational option.

All in all, however, these deficiencies are not so overbearing as to restrict the school from encouraging a poor but able and motivated student from going on to a post-secondary education of his or her choice. Given circumstances as they are, the school could maximize the potential effects of current aid programs.

Directly related to this argument is the importance of money or value orientation in students' educational aspirations. The fact that the evidence on this question has been so inconclusive makes it difficult for school counselling. The situation is not impossible though. It is felt that some improvement in accessibility to post-secondary education could be obtained if the school involves both student and parent in an appropriate motivational program.

As Havigurst (1962) argued: These young people who do not now go on to college cannot be reached with a scholarship program which does not have a companion motivational programme" (p. 31). He also implied such a program for parents as well. The essential thing is to present the range and implications of available educational options, in a more intensive fashion than is done at present, especially for parents. Any attempt to conduct further research into the type of values which affect students' and parents' thinking would be quite useful in enhancing the school's role in this respect. The most potentially rewarding areas seem to be the transition from public to secondary school.

Post-secondary institutions in Ontario are quite varied. Furthermore, within the secondary school, there is a diversity of program options which, once accepted, channel students towards particular forms of occupational careers. The school policy, as stated, leaves final responsibility for educational decisions to the student. Moreover, the general attitude is to "encourage students" to appear voluntarily for personal advice on program planning. In light of the diversified high school programs and recent curriculum revisions, the school could consider how a student's willingness to seek counselling varies with social and academic characteristics of the student. Given the evidence that many poor students with high ability do not have high educational aspirations, the school could also consider a more action-oriented counselling program. This, of course, depends on the extent to which the school wants to interfere with the possible satisfaction with which the student makes his or her choice. It also depends on the extent to which the school wants to influence parents especially poor parents, to change the educational expectations for their children. This is a critical step, mainly because with grade 8 students for example, it is felt that parental feelings play a direct and important role in their educational choices.

The evidence strongly suggests that information on post-secondary options ought to begin as early as possible. Grade 8, for instance, seems to possess a sound basis for looking at how students process relevant information. There is a definite possibility that students at this level may, in some ways, resist the direction of educational advice offered to them. Information dissemination must therefore be accompanied by a careful analysis of how and why some students reject, perhaps inadvertently, the message for further education. This acknowledges the fact that some attitudes do not change very easily. Indeed, such a message, if not properly conveyed, may produce an effect quite opposite to the one intended. The possibility that such resistance may be related to social class bears serious implications for the schools' policy of maximizing educational options for all its students.

Grade 8 remains crucial not only in terms of program choice, but more so, in light of the fact that at higher grades, attrition rates are more to the disadvantage of the poor student. A motivational or informational program at such higher levels will thus be done without the presence of some who may have needed it most.

In summary, the role of the school in terms of "improving accessibility to post-secondary education" could begin with a systematic information and motivational program, emphasized possibly in grade 8. Serious attention and analysis would, however, have to be given to the ways in which these students process the advice offered. Even though a student's educational aspiration is a personal quality, it reflects to some extent the nature and processes of a society. In Ontario, the reflection is not exactly inspiring. There is a lot more to be done.

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